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VOLUME

## Ethyl Alcohol Becomes a Global Commodity

FINDING

Ethyl alcohol can be made from any commodity containing starch or sugar, including sorghum, barley, grasses, and even paper: The U.S. Postal Service has investigated converting undeliverable mail to ethyl alcohol. Corn is the primary commodity used in the U.S. however, because, in this country, it is the least costly way to generate starch. In 2003/04, 1.2 billion bushels of the 10.1-billion-bushel corn crop was used to produce ethyl alcohol, up 23 percent from 2002/03, which itself was a 36-percent rise from 2001/02.

Why the increase in ethyl alcohol production? Ethyl alcohol has a number of industrial uses, including use as a drying agent in perfumes and aftershave lotions. Accounting for most of the growth in use, however, is the production of ethanol—a blend of ethyl alcohol and gasoline. Motor vehicles using gasoline containing ethanol can reduce carbon monoxide emissions. In 1978, to encourage greater production and use of ethanol, policymakers passed legislation creating a "blender tax credit," which



effectively reduces the price consumers pay for ethanol. In addition, the requirements of the Clean Air Act amendments have prompted some States, including California, Connecticut, and New York, to switch to using ethanol as an oxygenate in gasoline, because it is less damaging to the environment than other oxygenates.

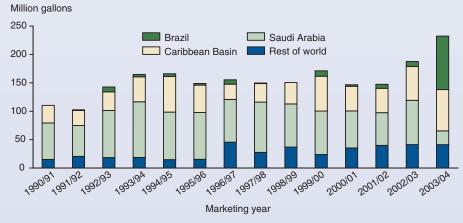
Most ethyl alcohol used in the U.S. is produced domestically: U.S. capacity is currently estimated at 3.6 billion gallons per year. However, sharp increases in U.S. ethanol use this past year pushed prices high enough to stimulate imports, despite duties matching the blender tax received by U.S. producers of alcohol used for fuel.

Among the largest suppliers are the countries of the Caribbean Basin Initiative, which are exempted from duties on any ethanol produced from regional feed stocks to stimulate economic growth in this region. Another large supplier is Saudi Arabia, which produces alcohol from ethylene gas, a byproduct of petroleum refining.

But the largest supplier in 2003/04 was Brazil, which began producing ethyl alcohol from sugar to cut petroleum imports after petroleum prices rose in 1973. The Brazilian Government specifies the percentage of alcohol to be included in gasoline, depending on sugar prices, and encourages the production of automobiles that run on alcohol.

Brazil's future in the U.S. ethanol market will depend on infrastructure developments, petroleum prices, and the price of sugar versus corn. Brazil recently announced plans to improve infrastructure to facilitate export loading and to cut time and costs in ship loading. But petroleum prices near \$50 per barrel have boosted Brazilian demand for ethyl alcohol, basically eliminating exports to the U.S.  $\mathcal{W}$ 

## In 2003/04, Brazil was the leading source for U.S. ethyl alcohol imports



Source: Bureau of the Census.

## Allen Baker, albaker@ers.usda.gov This finding is drawn from ...

Feed Outlook Reports, available at: http://usda.mannlib.cornell.edu/reports/ erssor/field/fds-bb/

See also the ERS Feedgrains Data Delivery system, available at: www.ers.usda.gov/db/feedgrains/